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- 13. (New) The immobilized enzyme according to one of claims 11 and 12, wherein said carrier comprising a porous inorganic material has a pore size of 10-80 nm.
- 14. (New) The immobilized enzyme according to one of claims 11 and 12, wherein said (S)-hydroxynitrile lyase is derived from a plant of *Euphorbiaceae*, *Poaceae* (*Gramineae*), or *Olacaceae*
- 15. (New) The immobilized enzyme according to claim 13, wherein said (S)-hydroxynitrile lyase is derived from a plant of *Euphorbiaceae*, *Poaceae* (*Gramineae*), or *Olacaceae*.
- 16. (New) A method for producing an immobilized enzyme, comprising immobilizing (S)-hydroxynitrile lyase in a carrier comprising a porous inorganic material.
- 17. (New) The method for producing an immobilized enzyme according to claim 16, wherein said carrier comprising a porous inorganic material is selected from the sintered clay carrier, the silica carrier, the alumina carrier and the silica alumina carrier.

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Attorney Docket No.: 04853.0055

B31)

- 18. (New) The method for producing an immobilized enzyme according to one of claims 16 and 17, wherein said carrier comprising a porous inorganic material has a pore size of 10-80 nm.
- 19. (New) The method for producing an immobilized enzyme according to one of claims 16 and 17, wherein said (S)-hydroxynitrile lyase is derived from a plant of *Euphorbiaceae*, *Poaceae* (*Gramineae*), or *Olacaceae*.
- 20. (New) The method for producing an immobilized enzyme according to claim 18, wherein said (S)-hydroxynitrile lyase is derived from a plant of Euphorbiaceae, Poaceae (Gramineae), or Olacaceae.
- 21. (New) A method for producing optically active cyanohydrin, comprising bringing the immobilized enzyme according to one of claims 11 and 12 into contact with a carbonyl compound and a cyanogen compound in the presence of a slightly water-soluble or water-insoluble organic solvent.
- 22. (New) A method for producing optically active cyanohydrin, comprising bringing the immobilized enzyme according to claim 13 into contact with a carbonyl compound and a cyanogen compound in the presence of a slightly water-soluble or water-insoluble organic solvent.

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23. (New) A method for producing optically active cyanohydrin, comprising bringing the immobilized enzyme according to claim 14 into contact with a carbonyl compound and a cyanogen compound in the presence of a slightly water-soluble or water-insoluble organic solvent.

- 24. (New) A method for producing optically active cyanohydrin, comprising bringing the immobilized enzyme according to claim 15 into contact with a carbonyl compound and a cyanogen compound in the presence of a slightly water-soluble or water-insoluble organic solvent.
- 25. (New) The method for producing an optically active cyanohydrin according to claim 21, wherein said immobilized enzyme is collected to be reused from a reaction mixture after the completion of a reaction for producing an optically active cyanohydrin.
- 26. (New) The method for producing an optically active cyanohydrin according to claim 22, wherein said immobilized enzyme is collected to be reused from a reaction mixture after the completion of a reaction for producing an optically active cyanohydrin.
- 27. (New) The method for producing an optically active cyanohydrin according to claim 23, wherein said immobilized enzyme is collected to be reused

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